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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,368	07/09/2001	Nithyalakshmi Sampathkumar	MS180587.1	6483

27195 7590 02/28/2005

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EXAMINER

HILLERY, NATHAN

ART UNIT PAPER NUMBER

2176

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/901,368	<b>Applicant(s)</b> SAMPATHKUMAR ET AL.	
	<b>Examiner</b> Nathan Hillery	<b>Art Unit</b> 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 20-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/2/03; 1/10/02</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. This action is responsive to communications: Restriction Election filed on 11/23/04.
2. Claims 1 – 19 are pending in the case as a result of an election by applicant. Claims 1 and 19 are independent.

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over ADO.NET (It should be noted that while the reference cited and provided is in a foreign language, the Office is relying on the source code disclosed within the reference, which is substantially written in English; the Office is acquiring an English translation in the interim) and further in view of Omoigui (US 20030126136 A1).

5. **Regarding independent claim 1**, ADO.NET discloses **a transformer adapted to transform one or more input XML items in a first format to one or more transformed XML items in one or more second formats** (p 4). ADO.NET does not explicitly disclose **an output...** However, Omoigui teaches that *the Results Browser is responsible for displaying the results of queries, and the information on any local resources opened. The Results Browser preferably obtains one or more XML files from the Query Manager and merges these into a single XML file that represents a list of*

*objects. The list itself may be filtered or sorted as an initial step. The list as a structure is transformed by a special class of Skin (an XSLT transform sheet, possibly including some script) that handles lists. The list-Skin creates the primary DHTML (or the like) structure, e.g., a list, a table or perhaps a timed sequence. Object Skins manage the individual DHTML items that present the information for each object instance. List-Skins may handle the dispatch of individual object Skins (mapping object class to Skin), but the Results Brower preferably provides default mappings of class to Skin for simplicity (Column 40, paragraph 0759), which provide **an output manager adapted to facilitate selectively pulling and/or pushing a subset of the transformed XML items**. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of ADO.NET with the invention of Omoigui because such a combination would provide the readers of ADO.NET with *an integrated and seamless implementation framework and resulting medium for knowledge retrieval, management, delivery and presentation* (Column 5, paragraph 0071).*

6. **Regarding dependent claim 2**, ADO.NET does not explicitly disclose **action frame stack**. However, Omoigui teaches that *the preferred embodiment of the Information Nervous System provides support for all aspects of security: authentication, authorization, auditing, data privacy, data integrity, availability, and non-repudiation. This is accomplished by employing standards such as WS-Security, which provides a platform for security with XML Web Service applications. Security is preferably handled at the protocol layer via security standards in the XML Web Service protocol stack. This includes encrypting method calls from clients (semantic browsers) to servers*

(Agencies), support for digital signatures, authenticating the calling user before granting access to an Agency's Semantic Network and XML Web Service methods, etc.

(paragraph 0367), which provide that ***the transformer comprises an action frame stack adapted to hold one or more actions, an event state machine adapted to track state associated with transforming the one or more XML items and an event processor adapted to receive events generated in processing the one or more actions stored in the action frame stack.***

7. ***Regarding dependent claim 3***, ADO.NET does not explicitly disclose ***compiler***. However, Omoigui teaches that *the Presenter includes an SQLML interpreter. When the Presenter opens an SQLML file, it preferably interprets it by first parsing it, validating it, creating a master entry table, and then executing the entries in the entry table. Effectively, it "compiles" the SQLML file before "executing" it, not unlike how a language compiler compiles source code into an object module before it is then linked with other modules and executed. In the case of the SQLML interpreter, this process optionally involves loading other SQLML files via references. This process is preferably not cyclical. The client uses the XSLT templates in the "<skin>;" tags (if available and if not overridden by default or Agent Skins) to display the information for each declared object type. Any returned objects that do not have a declared Skin are displayed with the default Skin of the object type or, in the case of a single Agent entry, that of the Agent (if one is specified)* (paragraph 0971), which provide that ***a compiler adapted to compile one or more style sheets and produce one or more actions that can be employed by the transformer in processing associated with transforming the one or more***

**input XML items.** It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of ADO.NET with the invention of Omoigui because such a combination would provide the readers of ADO.NET with *an integrated and seamless implementation framework and resulting medium for knowledge retrieval, management, delivery and presentation* (Column 5, paragraph 0071).

8. **Regarding dependent claim 4**, ADO.NET does not explicitly disclose **compiler**. However, Omoigui teaches that *in addition, SQLML includes tags that enable semantic filtering (via custom links and predicates) which indicate how data is to be queried and filtered from the resources, and arguments that indicate how the resources are to be queried and how the results are to be filtered. In particular, the arguments can include references to local or remote context. The context arguments are then resolved by the client-side SQP at run-time to XML metadata* (paragraph 0274), which provide that **the compiler is further adapted to resolve one or more external references in the one or more style sheets**. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of ADO.NET with the invention of Omoigui because such a combination would provide the readers of ADO.NET with *an integrated and seamless implementation framework and resulting medium for knowledge retrieval, management, delivery and presentation* (Column 5, paragraph 0071).

9. **Regarding dependent claim 5**, ADO.NET disclose **the input XML items are input from one or more data stores** (p 5 – upper right hand corner).

10. *Regarding dependent claims 6 – 11, ADO.NET disclose an input abstractor adapted to expose data stored in the one or more data stores in a common representation, the input abstractor is further adapted to abstract a reference to a node within an Xpath document, the input abstractor is further adapted to expose the data stored in the one or more data stores as a data model and info set, the input abstractor is further adapted to provide a cursor model over data stored in a data store to facilitate presenting a stream of nodes to the transformer, the input abstractor is further adapted to provide a virtual node that can be employed to traverse the stream of nodes, and the input abstractor is an XpathNavigator (p 19).*

11. *Regarding dependent claims 12 – 14, ADO.NET disclose a node selection abstractor adapted to dynamically construct a subset of input XML items from a set of input XML items, where the subset of input XML items are responsive to a query, the node selection abstractor is further adapted to facilitate navigating the subset of input XML items, and the node selection abstractor is an XpathNodeIterator (pp 18 – 19).*

12. *Regarding dependent claims 15 – 18, ADO.NET disclose an optimized data store adapted to store one or more XML items in a manner that facilitates minimizing processing associated with constructing the subset of input XML items via a query, the optimized data store stores data in a data representation format that facilitates optimizing an Xpath query, the data representation format comprises expanded XML entities, deleted XML declarations and DOM model data*

*converted to Xpath model data, and the optimized data store is an XpathDocument* (pp 18 – 19).

13. **Regarding independent claim 19**, the claim incorporates substantially similar subject matter as claims 1, 3 – 6, and 12, and is rejected along the same rationale.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (571) 272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NH

  
**JOSEPH FEILD**  
**SUPERVISORY PATENT EXAMINER**